Amendments to the Claims:

This listing of the claims will replace all prior versions, listing, of the claims in the application:

Claim 1 (currently amended):
A digital serial communications hub comprising:

(a) a controller; and,

(b) a plurality of receiver-transmitter units operatively coupled to the controller; wherein the controller is programmed to delay, route and regenerate data at mixed baud rates, mixed character framing bits and mixed protocols by, in part, digitizing and quantizing all ~~incoming~~ received data in ~~the~~ a time domain, independent of a protocol necessary for understanding said received data.

Claim 2 (currently amended): A digital serial communications hub as recited in claim 1, wherein the controller is further programmed to filter for error correction and store in memory the ~~time domain~~ received data.

Claim 3 (currently amended): A digital serial communications hub as recited in claim 2, wherein the controller is further programmed to perform the following steps:

~~(1)~~ (i) measuring the received data's transition time~~s~~ values in the time domain, and storing in memory the ~~measured~~ transition time values;

~~(2)~~ (ii) analyzing the ~~stored~~ transition time values to determine if any error correction should be applied to the transition time values, and if so, applying an error correction procedure to the transition time values in need of error correction; and

~~(3)~~ (iii) reconstructing the received data with error correction.

Claim 4 (currently amended): A digital serial communications hub as recited in claim 3, wherein the correction procedure of step ~~(2)~~ (ii) further comprises:

(a) determining a common denominator of a standard baud rate, wherein the common denominator is a unit of time equal to ~~the~~ a time employed to transmit a single bit at a certain baud rate;

(b) dividing each ~~measured~~ transition time value of the received data by the common denominator; and,

(c) rounding off each ~~measured~~ transition time value to a closest interval equal to an integral number of common denominator periods.

Claim 5 (currently amended): A digital serial communications hub as recited in claim 3, wherein the controller is a microcontroller including a time module, and the step of reconstructing the received data is performed by sequentially moving the transition time values into ~~the~~ a timer module wherein the~~y~~ transition time values are used to reconstruct the received data, including the use of a port identifier associated with the received data to determine ~~the~~ a port~~(s)~~ or ports on which the received data will be re-transmitted.

Claim 6 (original): A digital serial communications hub as recited in claim 1, wherein the controller is further programmed to delay retransmission of the received data.

Claim 7 (currently amended):

A method for operating a digital serial communications hub, comprising

(i) digitizing and quantizing all ~~incoming~~ received data in ~~the~~ a time domain said received data further comprising mixed baud rates, mixed character framing bits, and mixed protocols;

(ii) error correcting the received data in the time domain;

(iii) retransmitting the error corrected received data, mixed baud rates, mixed character framing bits and mixed protocols, independent of a protocol necessary for understanding said received data.

Claim 8 (currently amended): A method as recited in claim 7, further comprising the following steps:

~~(1)~~ (i) measuring the received data's transition times in the time domain; and, ~~and~~

(ii) storing in memory the data transition ~~measured~~ time values;

~~(2)~~ (iii) analyzing the ~~stored~~ measured time values to determine if any error correction should be applied to the data transition time values and, if so applying an error correction procedure to the data transition time values in need of error correction; and

~~(3)~~ (iv) reconstructing the received data with error correction.

Claim 9 (currently amended): A method as recited in claim 8, wherein the error correction procedure of step ~~(2)~~ (iii) further comprises:

(a) determining a common denominator of a standard baud rate, wherein the common denominator is a unit of time equal to ~~the~~ a time employed to transmit a single bit at a certain baud rate;

(b) dividing each ~~measured~~ data transition time value of the received data by the common denominator; and rounding off each ~~measured~~ data transition time value to a closest interval equal to an integral number of common denominator periods.

Claim 10 (new):

A digital serial communications hub comprising:

(a) a controller; and,

(b) a plurality of receiver-transmitter units operatively coupled to the controller; wherein the controller is programmed to delay, route and regenerate data at mixed baud rates, mixed character framing bits and mixed protocols by, in part, digitizing and quantizing all received data in a time domain without knowledge of protocol, framing or other information necessary to digitizing or quantifying said received data.

Claim 11 (new): A digital serial communications hub as recited in claim 10, wherein the controller is further programmed to filter for error correction and store in memory the received data.

Claim 12 (new): A digital serial communications hub as recited in claim 11, wherein the controller is further programmed to perform the following steps:

(i) measuring the received data's transition time values in the time domain, and storing in memory the transition time values;

(ii) analyzing the stored transition time values to determine if any error correction should be applied to the transition time values, and if so, applying an error correction procedure to the transition time values in need of error correction; and,

(iii) reconstructing the received data with error correction.

Claim 13 (new): A digital serial communications hub as recited in claim 12, wherein the correction procedure of step (ii) further comprises:

(a) determining a common denominator of a standard baud rate, wherein the common denominator is a unit of time equal to a time employed to transmit a single bit at a certain baud rate;

(b) dividing each time value of the received data by the common denominator; and,

(c) rounding off each time value to a closest interval equal to an integral number of common denominator periods.

Claim 14 (new): A digital serial communications hub as recited in claim 12, wherein the controller is a microcontroller including a time module, and the step of reconstructing the received data is performed by sequentially moving the transition time values into a timer module wherein the transition time values are used to reconstruct the received data, said reconstruction step further comprising the use of a port identifier associated with the received data to determine a port or ports on which the received data will be retransmitted.

Claim 15 (new): A digital serial communications hub as recited in claim 10, wherein the controller is further programmed to delay retransmission of the received data.

Claim 16 (new): A method for operating a digital serial communications hub, comprising:

(i) digitizing and quantizing all received data in a time domain said data further comprising mixed baud rates, mixed character framing bits, and mixed protocols;

(ii) error correcting the received data in the time domain;

(iii) retransmitting the error corrected received data, mixed baud rates, mixed character framing bits and mixed protocols, without knowledge of protocol, framing or other information necessary to digitizing or quantifying said received data..

Claim 17 (new): A method as recited in claim 16, further comprising the following steps:

(i) measuring the received data's transition time values in the time domain;

(ii) storing in memory the transition time values;

(iii) analyzing the transition time values to determine if any error correction should be applied to the transition time values and, if so; applying an error correction procedure to the transition time values in need of error correction; and

(iv) reconstructing the received data with error correction.

Claim 18 (new): A method as recited in claim 17, wherein the error correction procedure of step (iii) further comprises:

(a) determining a common denominator of a standard baud rate, wherein the common denominator is a unit of time equal to a time employed to transmit a single bit at a certain baud rate;

(b) dividing each time value of the received data by the common denominator; and,

(c) rounding off each time value to a closest interval equal to an integral number of common denominator periods.